Professional Development Needs Assessment for Distance Educators at the University of the South Pacific

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Abstract: Separated by vast expanses of ocean on sparsely populated islands with limited infrastructure, distance educators in the South Pacific have incredible challenges to overcome. This research summarizes the strengths and needs of current distance education professional development (PD) programs and applications used by post-high school distance educators at the University of the South Pacific. Based on a survey and interview process this needs assessment was able to facilitate successes in the current online professional development programs. Through analysis and interpretation the survey data indicated positive patterns both qualitatively and quantitatively. The outcomes signified an encouraging and consistent PD training in a wide range of electronic media. While the sample size of participants was relatively modest, they generally agree they are well trained and their efforts as distance educators can have a strong impact on their student's achievement.

Introduction

The University of the South Pacific in Suva, Fiji is a remarkable example of where distance education is most needed. Geographic isolation, diverse satellite school cohorts, vast cultural and language differences represent barriers in monitoring and tracking what specific ICT tools are being used and how instructors are being trained to use them. As the number of distance learners is increasing rapidly in this region the focus on the skills of the ICT instructor appears insignificant. Research indicates a substantial lack of professional development inquiry into current and leading training methods, applications and resulting changes in professional practice and student achievement. This research project targets these gaps and attempts to collect information that will broaden the understanding of distance education professional development in the region.

The number of distance learners in the South Pacific is growing at a rapid rate. The University of the South Pacific reports an 80% increase in the number of distance learners using Information and Communications Technology (ICT) at the university

between 2000 and 2007 (Whelan, 2008). While the numbers of distance learners in the South Pacific grows data regarding the tools and training utilized by the instructors is limited. There is little comprehensive or focused data on what kind of professional development educators were given.

Karagiorgi and Charalambous (2006) point out that as countries continued to invest in ICT in education there is a greater need for performance indicators to monitor the use and effects of ICT. These indicators can show direct results of the professional development instructors are receiving. Karagiorgi and Charalambous (2006) go on to mention that there have been few studies that attempted to evaluate ICT training impacts in under-reported national contexts.

Literature Review

College level students overwhelmingly supported expanding the use of technology in education (O'Connel, Benson, & Samarawickrema, 2006). The demand for ICT instruction is clearly evident and the need for improved professional development must follow suit. Instructors in the South Pacific are in a difficult situation where there are wide differences in culture, access, and financially viable programs where distance education can be used consistently and affectively (Berg and Muilenburg, 2005).

Determining these perceptions and trends through a well developed survey provides valuable data that can guide distance learning instructors and those that train them (Black, DiPietro, Ferdig, & Polling, 2009). Sprat, Palmer & Coldwell (2000) note that in a recent study institutions that have made an investment in the use of information technologies in learning can maximize there investment by providing or identifying ways in which staff might receive ICT instructional support.

Karagiorgi and Charalambous (2006) point out that as countries continue to invest in ICT in education there is a greater need for performance indicators to monitor the use and effects of ICT. These indicators can show direct results of the professional development instructors are receiving. Karagiorgi and Charalambous (2006) also mentioned that there are almost no studies that attempted to evaluate ICT training impacts in under-reported national contexts. This is in line with Whelan's (2008) concerns regarding a lack of data detailing professional development programs in regions of the south Pacific.

During a 2008 South Pacific distance educator's workshop the top concern was reported to be the effective delivery of ICT instruction (Marshal, 2008). A study in New Zealand suggested that effective in-service training enhanced teacher performance, which in turn improves student achievement (Educational Review Office, 2000). Effective in-service training needed to address and target elevated levels of anxiety on the part of instructors utilizing ICT instruction.

Part of what makes ICT professional development successful is appropriate monitoring and evaluation systems concerning the use of ICT in schools and its impact on teaching and learning. These systems, according to an UNESCO (2009) report should have a set of

indicators. Most countries use quantitative data related to ICT infrastructure and connectivity, hardware and available networks. Within the context of ICT, research on professional development remains surprisingly limited as the economic impetus for ICT investment grows.

The implications of the research are clear. More in depth study in the field of distance education professional development is needed. This project targets some of these gaps. As more information is collected and analyzed administrative and instructor level planning can be more responsibly designed and delivered. This has long term implications for institutions that provide instruction electronically, from budgeting and planning to instructional design and delivery.

Method

Participants

The prime candidates this research needs assessment targeted were instructors at the University of the South Pacific that self-identify as having used distance education as a component of their instruction. A determining factor in identifying these candidates had initially been based on their years of experience or percent of online or distance instruction but was rejected based on the idea that the overall results of the survey research should not result in validity issues based on these factors. Following live interviews, it was apparent that while all considered themselves "distance educators" they ranged from those who used distance instruction at a minimum to those who used it regularly. Future research in this spectrum must address the key attributes or definition of "distance educator" in order to more definitively identify what a distance educator is and therefore, better applies research outcomes.

Procedure

During the fall of 2009 a survey instrument was developed and contacts at the University of the South Pacific were established. The primary delivery instrument in this research was electronic survey questionnaire delivered via an email link. The selection of the survey candidates was accessed through the distance education department at the USP as well as other related departments that use distance education in their programs and curriculum.

The target number of viable candidates was 30+ with a target number of minimum valid survey responses desired being 15. Sixteen survey responses were completed and considered valid. This survey was developed in a commercially available electronic survey development tool, "surveymonkey.com." The development of the survey involved specific constraints to improve validity and increase timely response rates. The actual response time in completing the survey was less than 15-20 minutes. The survey utilized both qualitative and quantitative questions. Each quantitative question was based on a #1-5 Likert scaled scoring option. Quantitative survey questions were linked to follow-up qualitative questions to support the validity of responses. The final procedure in this

study included phone conversations with two staff members at the USP who completed the survey. This final phase was the most telling and was very helpful in comprehending the resulting survey responses and trends.

The plan outline called for-

Survey Development Completion	Nov. 15, 2009
Respondent List Compiled/Verified	Dec. 15, 2009
Survey Package Delivered	Jan. 15, 2010
Survey Results Returned End	Feb. 15, 2010
Data Analysis and Follow-Up Survey (if needed)	March 1, 2010

Survey

The electronically delivered survey contained approximately 25 Likert scaled questions that probed several key aspects of current professional development at the University of the South Pacific. Questions targeted frequency and quality of the trainings, how training and support were provided, and what the primary electronic delivery methods were used and if they were specifically trained to use them.

Interview

Following the electronic survey delivery and after initial responses had been collected a follow-up phone interview was conduced with volunteer participants who also took the survey. Information was gathered with a question and answer session that focused on expanding information collected through the survey. This opportunity also allowed survey respondents to expand, explain and provide additional information they feel would be pertinent to understanding the scope of professional development needs at the USP.

Data Analysis

Data collection via electronic survey took place over a 45-day timeframe at the beginning of the 2010 calendar year to access the greatest number of respondents. The survey was delivered later rather than earlier in a school term to allow time for professional development opportunities and reflection on the most current distance education practices.
The analysis and interpretation process involved examining the survey data and determining patterns, both qualitatively as well as quantitatively, and trends in the perceptions of the professional development received by instructors.

Initially there was a lack of adequate respondents. The USP was contacted and additional information was shared that helped to aid in the delivery of the survey instrument. This aspect became extremely important to the validity of the overall research project. Final accounting showed there were a total of 20 survey responses. However, only 16 were deemed valid due to incomplete answers and/or wide variations in responses indicating a lack of clarity or comprehension regarding the survey questions.

Summary of Results

- There is a wide range in the number of professional development opportunities instructors had taken in the past year.

- 2% of respondents "agree" and 25% "strongly agree" that they received the necessary training to be effective in delivering instruction electronically. Only one participant felt he/she did not receive adequate training.

- When asked if PD training increased their ability to prepare students to meet challenges, responses were similar; 62% agreed and 15% strongly agreed.

- 87% of instructors used peer mentors for distance education support this is equal to the use of specialists, experts, or administrators.

- All participants agreed or strongly agreed that school staff have access to mentoring and coaching related to distance education.

- Just under half (44%) of participants indicated they had never taken a college course focused on distance education.

- When asked if the PD included instruction on the use of "data and assessments" to inform instructional practices, responses were mixed. 43% neither agreed nor disagreed, and 44% agreed representing an overall average rating of 3.69/5.

- Another interesting finding was that when participants were asked if professional development is planned systematically and collaboratively, responses were also mixed. 56% neither agreed nor disagreed, 31% agreed, and 13% strongly agreed.

- Overall PD participation appears inconsistent and in competition with academic only PD offerings.

- A systematic approach to ongoing and long-term PD appeared absent except for first year instructors.

Interview Results

Based on several 15-20 minute interview sessions with distance education personnel and instructors at the University of the South Pacific, much more information was provided that helped to clarify and explain the reasons for a particular pattern of responses.

In terms of professional development, since 2007, the USP has provided guided and self-paced instructional development. Face-to-face training sessions regarding distance education are offered at least twice a school year. In comparison, information was offered that indicated there were 5-8 academic (non-distance learning) professional developments offered. This indicates PD opportunities are strong but e-learning PD can become a secondary concern.

Since 2006 this PD focus has been with Moodle. Staff reported they are "very happy" with this focus. Instructors can functionally access professional development from any one of the multiple satellite schools under the University of the South Pacific umbrella. Professional development is also offered on a general academic basis between 5 and 8 times per year.

In addition, the interview allowed respondents to elaborate on specific challenges that distance educators experienced in regards to professional development. The overwhelming issue was reported to be pre-ordinate technology skills required to be comfortable in a distance education setting, especially for those transitioning from face-to-face to e-learning instruction. Interviewers also expressed a perceived "shock" when instructors were in the midst of this transition. Interviewees also indicated a somewhat lackluster adoption rate of instructors using technology. It was speculated the lack pre-ordinate skills are a factor in this unimpressive adoption rate.

Implications for Practice

Due to the variation in the number of professional development trainings that staff at the USP had taken (Table 2) and that a majority (56%) of participants felt neutral about staff "systematically and collaboratively planning their professional development" it may be practical to establish an internal needs assessment in this particular area. This can empower instructors to guide the level and frequency of provided professional development. This recommendation can also support instructors in developing plans for their own professional growth, an area of only marginal enthusiasm.

The shear number of participants that reported they have peers and mentor access is positive but leads to further questions. To what degree and frequency does this take place? Are there measurable outcomes? Further research in this particular spectrum can also guide professional development needs for fellow distance educators. This constructivist approach can scaffold a support system that may target how to facilitate a peer mentor program that goes beyond conventional PD offerings.

Participants in the study showed that less than half of the distance education staff had taken college courses directly related to distance education. This has several implications. A number of staff at the USP likely did not begin their tenure as distance educators. The USP professional development structure is the sole training mechanism utilized for 44% of respondents. This implies there is room for incentives for instructors to take college courses in this field (if available) as a matter of professional development. In addition, more focused recruitment of instructors with educational technology training can circumvent this statistic.

When asked what type of online tools are used in their distance education the overwhelming percent of respondents use web-based or online methods. Due to the geographic nature of the USP there was a good amount of overlap with other methods (table 1). These results indicated a scattered need for various technologies throughout the USP system. Clearly, infrastructure and access prohibit some forms of distance education methods and reductions of delivery methods. However, this indicates a broad PD responsibility, a diverse array of funding needs, and a multitude of experts that may be required to support such diverse methods of instruction.

A concern that pre-ordinate skills and slow adoption rates for new distance educators was evident following the interview process. This information points to a need for basic or introductory professional development that aims to lower anxieties and establish entry skills for this group of instructors.

Conclusions

This study overwhelmingly indicated the quality and depth of professional development that is offered at University of the South Pacific. Distance educators at the USP operate in one of the most remote and challenging educational environments on earth. Instructors feel well prepared and supported both at the administrative and peer levels. They utilize the web as a primary method of instruction but are also adept at using a wide variation of instructional tools depending on the regional need and available infrastructure. Prime considerations resulting from this study include a perception that incentives can influence educators to take college course in the area of distance education. Recruitment of skilled distance educators or basic skills support can reduce the initial “shock” of instructors who transition from face-to-face to distance teaching models. There appears to be room for a more systematic PD regime for both new and experienced instructors. While overall professional development appears strong many of these conclusions require more focused inquiry to substantiate policy change.

Table 1

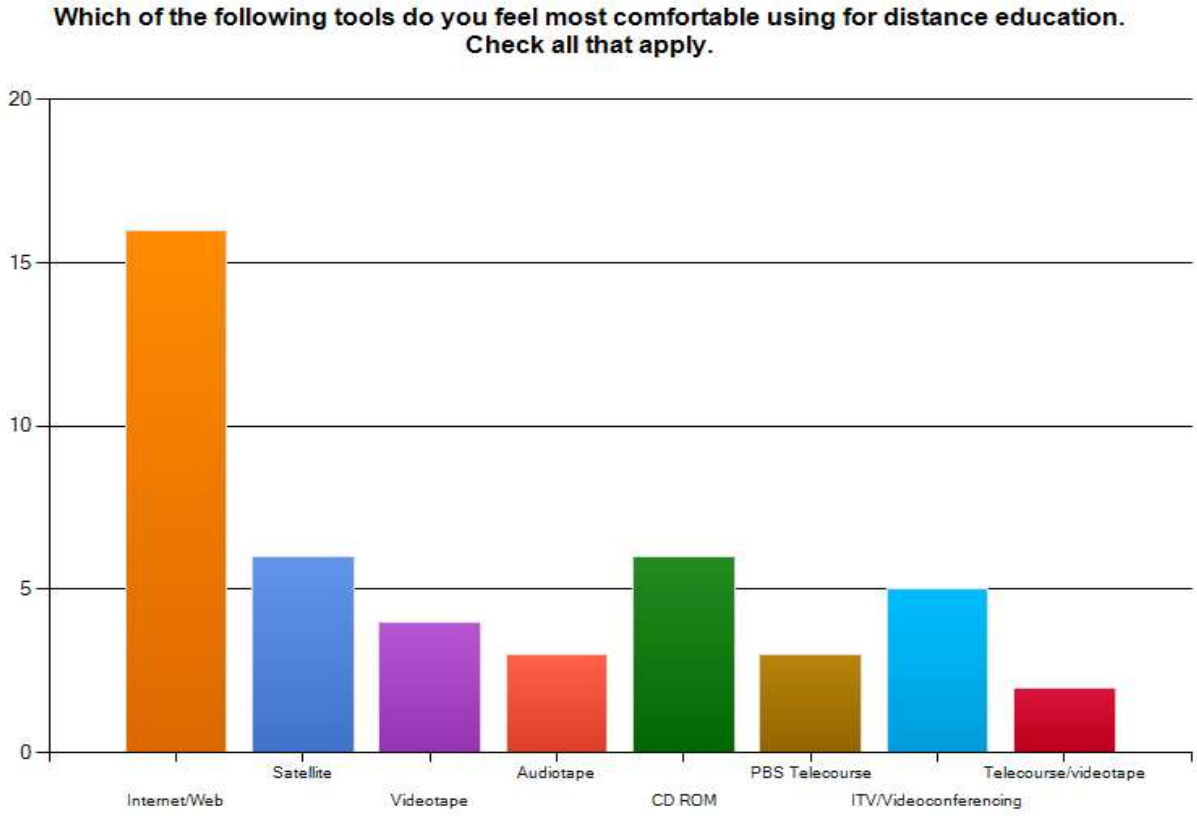
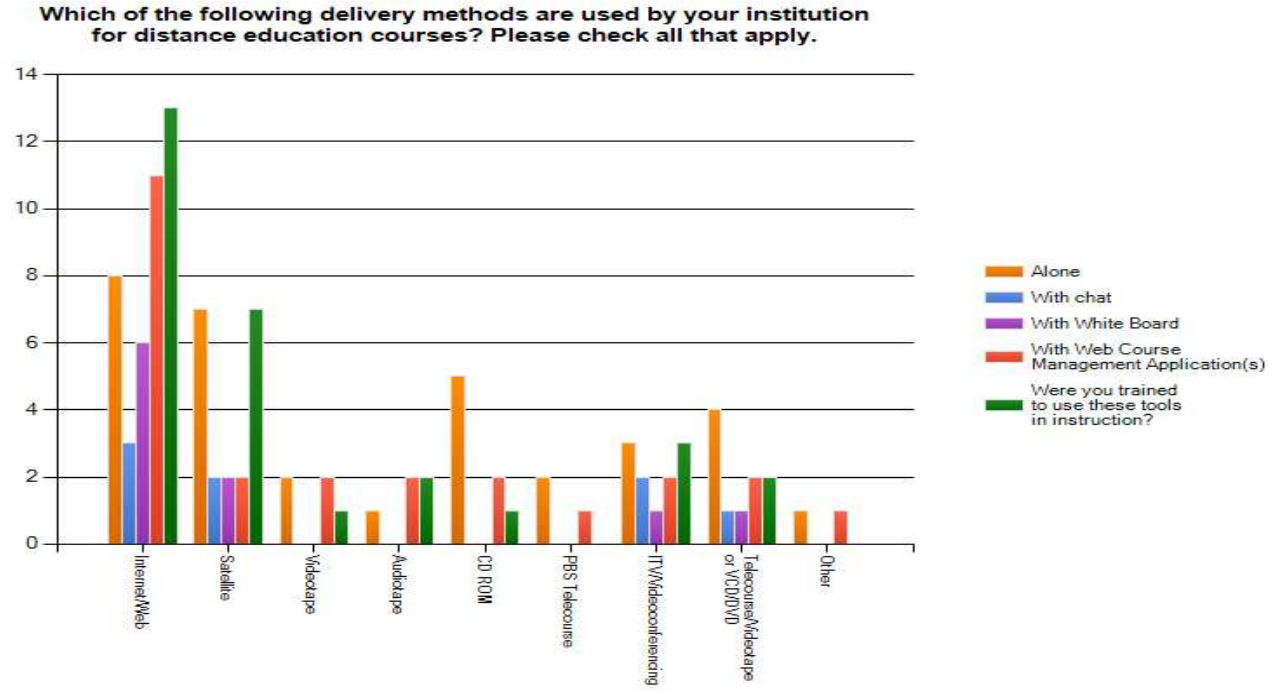


Table 2



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